

12/5/2005 Response to Office Action
U.S.S.N. 10/689,167

Page 9

REMARKS

Claims 1-8 and 10-57 are pending in the above referenced application. Claims 1, 2, 4, 5, and 10 are rejected. Claims 3 and 6-8 are objected to. Claims 11-57 are allowed.

The subject Office Action has made the action final. Applicants assert that the amendments made with this response place the application in condition for allowance. Applicants respectively request reconsideration in view of the following claim amendments and remarks.

I. CLAIM OBJECTIONS

Claims 3 and 6-8 stand objected to as being dependent upon a rejected base claim. Claim 1 is currently amended to place the claim in condition for allowance. Claims 3 and 6-8, therefore, would no longer depend upon a rejected base claim. Applicants respectfully request the objections to claims 3 and 6-8 be withdrawn.

II. 35 U.S.C. § 102(e) REJECTIONS

Claims 1, 2, 4, 5 and 10 stand rejected under 35 U.S.C. § 102(e) as being anticipated by DeReus, U.S. Patent Application No. 6,876,482 (herein referred to as "DeReus"). With respect to the independent claim 1, the Office Action states that DeReus discloses a MEM device comprising: a movable micromachined structure 108; and a diamond material 118 disposed along a surface of said micromachined structure said diamond material defining an abrasion resistive contact area (reference made to column 9, line 50 through column 10, line 41). The Office Action further states that the applicant's previously submitted argument, with respect to this

Cabot Microelectronics Corporation
870 North Commons Drive
Aurora, IL, 60504
Tel. (630) 375-2033

9

12/5/2005 Response to Office Action
U.S.S.N. 10/689,167

Page 10

rejection, was incorrect. The Office Action states that the 'diamond material' referred to in the previous Office Action is described in the DeReus patent as 118 in Figure 1, a non-conductive standoff bump designed to prevent a stationary electrode from contacting a movable electrode (column 10, lines 35-41). The Office Action further states that the DeReus diamond bump 118
5 clearly defines not only a "contact area", but an "abrasive resistive" one because diamond is notoriously hard.

Applicants agree that the diamond material described by DeReus is the non-conductive stand off bump 118 in Figure 1. Applicants additionally acknowledge the failure to clearly differentiate a physical contact from an electrical contact in the previous response. Applicants
10 have currently amended Independent Claim 1 to now expressly recite "a conductive diamond material disposed along a surface of said micromachined structure, said diamond material defining an abrasion resistive contact area." Support for the amendment is found in paragraph 136 of the original specification. No new matter enters the application as a result of this amendment.

15 The diamond material of DeReus is clearly stated as a physical contact that "preferably comprises a non-conductive material for preventing an unwanted electrical short between movable electrode 114 and stationary electrode 106" (column 9, lines 60-63 of DeReus).

To anticipate a claim, "each and every element set forth in the claim [must be] found, either expressly or inherently described, in a single . . . reference." *Verdegall Bros. V. Union Oil*
20 *Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987) (M.P.E.P. Section 2131). Consequently,

Cabot Microelectronics Corporation
870 North Commons Drive
Aurora, IL, 60504
Tel. (630) 375-2033

10

12/5/2005 Response to Office Action
U.S.S.N. 10/689,167

Page 11

because DeReus does not teach or suggest "a conductive diamond material disposed along a surface of said micromachined structure, said conductive diamond material defining an abrasion resistive contact area ", DeReus does not to teach every element of the claimed invention and, hence, does not anticipate amended Independent Claim 1.

5 As a consequence, Independent Claim 1 is allowable for at least all of the reasons stated above. Claim 10 has been amended to include the same clarifying term "conductive" to the diamond material element. The remaining rejected claims 2, 4, and 5 are dependent on allowable Independent Claim 1 and are therefore allowable for at least the reasons states above.

10 In view of the remarks above, the applicants respectfully submit that the present application is in condition for allowance and solicits action to that end. If there are any additional matters that may be resolved or clarified through a telephone interview, the Examiner is respectfully requested to contact Applicant's undersigned representative.

Respectfully submitted,

By:



Thomas Omholt
Reg. No. 37,052

Cabot Microelectronics Corporation
870 North Commons Drive
Aurora, IL, 60504
Tel. (630) 375-2033

11